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KRIS V FINAL PROGRESS REPORT

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The Klamath Resource Information System (KRIS) was initiated through a California State Water Resources Control Board contract (#1-166-251-0). Its development was extended in 1994 (#1-166-251-1), 1995 (# 4-087-250-0), 1996 (# 5-129-251) and its final phase in 1999 (# 99-319H-09). This latter contract, which is virtually complete as of this writing, is referred to as "KRIS V". The contract is administered by the Klamath River Fish and Wildlife Office (YFWO) of the U.S. Fish and Wildlife Service as Cooperative Agreement #113339J049. The agreement was signed in March, 1999 and is scheduled to close at the end of December,1999. This 3 December 1999 report concerns a project, then, that is virtually completed.

Task 1: Teach FWS YFWO competency in updating KRIS

The KRIS Append tool has been created by Dr. Jan Derksen and installed on USFWS computers in Yreka as well as those of the Salmon River Restoration Council and the Shasta CRMP. Jennifer Silveira has been instructed in the use of KRIS AppendPatrick Higgins has demonstrated to Jennifer how to use the Phillips CD ROM writer purchased for the KRIS project by pressing a disk with her. Pat and Jennifer have also worked on organizing map information to support KRIS projects.

Complete tutorials and help applications have been developed for new program elements, including KRIS Append, and they will be available during two days of training sessions scheduled at the Siskiyou County Office of Education, in Yreka, during the second week in December.

These KRIS tutorial and help applications will, then, be part of the completed KRIS V final CD program, which will be delivered to the USFWS/Yreka before December 31, 1999.

Task 2: Assist the YFWO in the review and correction of data submitted to the office by Restoration Program cooperators [KRIS quality assurance and control]

Patrick Higgins has worked with Jennifer Silveira to update KRIS and to integrate changes. Changes from the Shasta and Salmon Rivers were integrated first. The Shasta CRMP's Dave Webb and Salmon River Restoration Council staff have helped with editing as well. Pat also has worked with the Scott CRMP and the Tribes. Scott River temperature data is being integrated by the Scott CRMP staff and additional photos of restoration projects have also been added. The Karuk Tribe will be using KRIS to add photos of their Steinacher Creek road decommissioning project. Water quality data from Indian Creek will also be entered into KRIS. The Yurok Tribe has provided pictures and

captions of restoration projects related to erosion control in the Lower Klamath Basin. Other Yurok Natural Resource Department staff will be entering water temperature data from the mainstem Klamath River. Final discussions are planned with Jennifer in December on trend analysis, further topic creation, and proofing. Map elements of KRIS have also been integrated from Restoration Program cooperators, and USFWS staff will also be briefed on keeping them current.

Task 3: Provide a minimum of two training sessions to further competency of KRIS cooperators in using KRIS/DB and KRIS/Map to store, retrieve, transfer, and manipulate water quality and fisheries data

A training session was provided in late summer for the Siskiyou County 319(h) program participant school teachers, who are participating in the updating of KRIS. Substantial technical assistance and support has been provided to Trudy Rilling, the Siskiyou County Office of Education watershed education coordinator. One-on-one technical assistance has been provided the Salmon River Restoration Council (SRRC), the Shasta CRMP, the Scott CRMP, the Yurok Tribe, the Hoopa Tribe, the Karuk Tribe and the US Fish & Wildlife Service's Yreka Office. The final group trainings in the use of KRIS/DB will take place December 7 at the Siskiyou County Schools Office and the final KRIS?Map training will take place Wednesday, December 8 at USFWS Yreka.

Task 4: Improve the capability of Restoration Program cooperators in entering data and transferring data in KRIS by:

- Making a tool to export Topics and attached files
- Creating multiple record select option
- Creating Tutorials and/or Helps for transferring data via E-mail an entering photographs in KRIS

KRIS team member Jan Derksen has completed construction of an Import/Export Topic tool. The tool is in field tests.

Jan completed, as well, a Multiple Record Delete tool for KRIS Source and Chart Tables. Both tools are operational in the KRIS Windows 95 version, which is currently in circulation with the test group.

Other additions to the new version of the KRIS program include:
- add or delete a new column to a KRIS table
- enter calculated values in a KRIS table column
- an entirely new Metadata system
- a spell-checking program
- the calculation of floating weekly averages
- the use of long file names

Separate programs have been added that repair KRIS tables in the event of a crash (Krisrepair.exe), which allow the transfer of files from the CD while maintaining the read-write functions (Copydirectory.exe) and which allow the upgrading of a KRIS/DB table from Windows 3.1 to Windows 95 (Update.exe). Users will now be able to run KRIS entirely from a CD ROM with less than 10 Mb of hard disk space taken up. File names can now be up to 50 characters long, allowing greatly increased file identification.

Task 5: Provide additions to KRIS' bibliography, with emphasis on monitoring tools

A number of monitoring-related documents have been acquired for entry into the KRIS Bibliography. The Klamath Restoration Program Mid-term Evaluation has been captured and added to the KRIS Bibliography. All additional entries will be provided with the CD delivered at the end of December.

Task 6: Enter climate data and create associated topics

Climate data has been downloaded from the California Data Exchange Center (CDEC) and formatted for entry into KRIS. Topics will be completed and delivered on the CD submitted to USFWS by the end of December 1999. Additional Topics have been added for restoration projects and flood damage, water temperature in the Shasta River, and water quality data from the Shasta CRMP gauge. New Topics have also been added for the Scott River, Middle Klamath, Salmon River and Lower Klamath sub-basins as well.

Task 7: Submit progress reports, a draft final, and final report describing the above tasks and their relationship to development, use, and management of the KRIS system.

The Final Progress Report was submitted to the USFWS/Yreka on December 3, 1999.